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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/619,785	07/15/2003	Alexander S. Borovik	ATMI-665	7812

7590 05/24/2005

ADVANCED TECHNOLOGY MATERIALS, INC.  
7 Commerce Drive  
Danbury, CT 06810

EXAMINER

DENTZ, BERNARD I

ART UNIT	PAPER NUMBER
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1625

DATE MAILED: 05/24/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/619,785

Applicant(s)

BOROVIK ET AL.

Examiner

Bernard Dentz

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1625

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 18 February 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,2,4-13,18-34,40,41,43-52 and 57-66 is/are pending in the application.
- 4a) Of the above claim(s) 18-34,40,41,43-52 and 57-66 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2,4-10 and 13 is/are rejected.
- 7) ☒ Claim(s) 11 and 12 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☒ Other: references

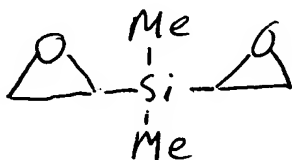
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The restriction requirement is repeated and made final for the reasons of record.

Non-elected claims 18-34, 40, 41, 43-52 and 57-66 are withdrawn from consideration.

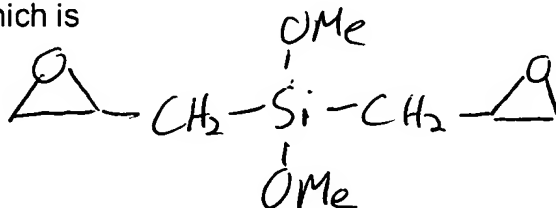
Claims 1, 2 and 4-13 drawn to the elected compounds are under consideration.

Claims 1, 2, 6, 10 and 13 are rejected under 35 U.S.C. 102(b) as being anticipated by R.N. 18191-70-3 which is



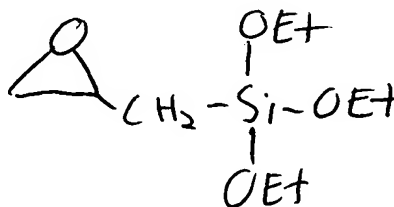
See attached print-out.

Claims 1, 2, 4 and 8 are rejected under 35 U.S.C. 102(b) as being anticipated by R.N. 266337-39-7 which is



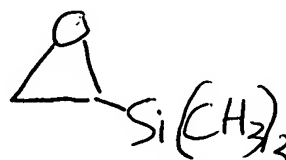
See attached print-out.

Claims 1, 2, 4 and 7 are rejected under 35 U.S.C. 102(b) as being anticipated by R.N. 17611-73-3 which is



See attached print-out.

Claims 1, 2, 4 and 5 are rejected under 35 U.S.C. 102(b) as being anticipated by R.N. 30423-45-1 of the structure



Claims 1, 2, 4 and 5 are rejected under 35 U.S.C. 102(b) as being anticipated by R.N. 23820-01-1 of the structure

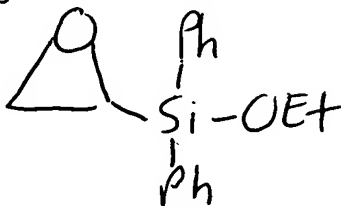


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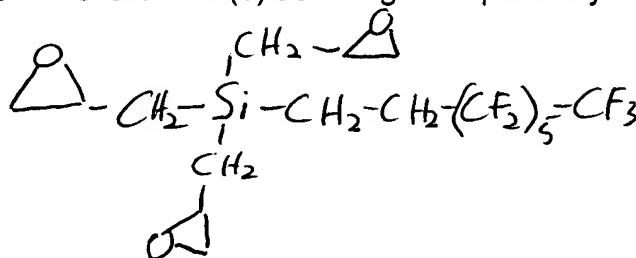
See attached print-out.

Claims 1,2,4 and 5 are rejected under 35 U.S.C. 102(b) as being anticipated by R.N. 33979-86-1 of the structure

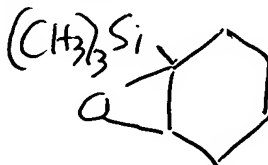


See attached print-out.

Claims 1,2,4 and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by R.N.415708-50-8 of the structure



Claims 1 and 2 are rejected under 35 U.S.C. 102(b) as being anticipated by R.N. 60484-85-7 of the structure



Claims 1, 2 and 4-9 are rejected under 35 U.S.C. 102(b) as being anticipated by CA 108:206543, the Chem. Abstract of Behrendt et al German (East) DD 247458. It discloses a genus epoxides as a reactant in the preparation of polymeric carriers useful in molecular biology, chromatography, etc. The compound of R.N. 17611-73-3 (see above) is exemplified.

Claims 1, 2 and 4-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over CA 108:206543 supra. In view of the generic disclosure overlapping the instant compounds narrower portions of the genus are rendered obvious.

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The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 2 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. "n" is not defined.

The first 2 compounds of claim 10, which are the species claimed in claims 10 and 11 respectively are deemed to be allowable. The Examiner will not allow applicants to amend the claims around the art or to broaden these 2 compounds in any way. The reason for this is that there is no supported sub-genus containing these compounds that is supported by the disclosure. Further note the considerable art of which only a fraction has been illustrated.

Note that at p. 25 in Ex. 2 in the third line of instructions that a CH<sub>2</sub> group is missing from the Si containing reactant.

If applicants limit the claims to the 2 above mentioned compounds a supported method of making them and a method of making a low K, high strength dielectric film using them will be considered.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bernard Dentz whose telephone number is 571-272-0683. The examiner can normally be reached on Mon-Fri from 8 to 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cecilia Tsang, can be reached on 571 272-0562. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Dentz

5-13-2005



RICHARD DENTZ  
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GROUP 1600